



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,161	11/21/2001	Masashi Aonuma	Q66561	9563

7590 02/08/2007
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER
VAN HANDEL, MICHAEL P

ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/989,161

Applicant(s)

AONUMA, MASASHI

Examiner

Michael Van Handel

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responsive to an Amendment filed 11/15/2006. Claims 1-12 are pending. Claims 9-12 are new.

Response to Arguments

1. Applicant's arguments regarding claims 1 and 5, filed 11/15/2006, have been fully considered, but they are not persuasive.

Regarding claims 1 and 5, the applicant argues that Camara et al. fails to teach a buffer, as claimed by the applicant. The examiner respectfully disagrees. Specifically, the applicant argues that the examiner's assertion that a buffer is inherent to the scanner is improper. As stated in the Office Action mailed 6/15/2006, the examiner notes that buffer memory is inherent to the scanner 24 in order to transfer data on a Universal Serial Bus (USB) network. In support of this assertion, the examiner directs the applicant to the Universal Serial Bus (USB) Specification, Revision 1.0, which states that USB devices are required to provide some buffering of data (USB Specification, p. 34, 4.7.5). Since the scanner must include a buffer in order to comply with the USB Specification, the examiner respectfully disagrees with the applicant's assertion that there are several alternative structures that can be employed to perform the same function. Thus, the examiner maintains that Camara et al. discloses that "the image information reading apparatus comprises a buffer memory for storing the image data for the sheet and sequentially stores in the buffer memory the image data obtained at the time of reading the image data while sequentially outputting the image data from the buffer memory," as currently claimed.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Camara et al.

Referring to claims 1 and 5, Camara et al. discloses an image data transfer system comprising an image information reading apparatus (scanner 24) for reading image data representing an image from a sheet having the image recorded therein and an image display apparatus (computer 22) connected to the image information reading apparatus by a network (universal serial bus (USB) 50)(Fig. 1), the image data read by the image information reading apparatus being transferred to the image display apparatus and the image display apparatus displaying the image data as a visible image (Fig. 5), wherein the image information reading apparatus comprises a buffer memory for storing the image data for the sheet and sequentially stores in the buffer memory the image data obtained at the time of reading the image data while sequentially outputting the image data from the buffer memory (the examiner notes that buffer memory is inherent to the scanner 24 in order to transfer data on a USB network and that data must be sequentially stored in this buffer memory, while being sequentially output in order to progressively display the image as that taught by Camara et al.)(col. 5, l. 54-61).

Art Unit: 2623

Referring to claims 2 and 6, Camara et al. discloses the image data transfer system according to claims 1 and 5, respectively, wherein the image display apparatus is separately and independently housed from the image information reading apparatus (Fig. 1).

Referring to claims 3 and 7, Camara et al. discloses the image data transfer system according to claims 1 and 5, respectively, wherein the network utilizes one of Ethernet, Universal Serial Bus (see claim 1) and FireWire (IEEE 1394) connection.

NOTE: The USPTO considers the applicant's "one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims 4 and 8, Camara et al. discloses the image transfer system according to claims 1 and 5, respectively, wherein the image display apparatus sequentially displays the image data from a first image from the buffer memory of the image information reading apparatus, while the image information reading apparatus reads the image data of said first image from the sheet (see claim 1).

Referring to claim 9, Camara et al. discloses the system of claim 2, wherein the buffer memory is incorporated in a housing of the image reading apparatus (the examiner notes that it is inherent that a buffer be included in the scanner in order to transfer data on a USB network).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigyo in view of Camara et al.

Referring to claim 1, Shigyo et al. discloses an image data transfer system transfer system comprising an image information reading apparatus 14 for reading image data representing an image from a sheet having the image recorded therein (col. 6, l. 23-30 & Fig. 1) and an image display apparatus 20 connected to the image information reading apparatus by a network, the image data read by the image information reading apparatus being transferred to the image display apparatus and the image display apparatus displaying the image data as a visible image (col. 6, l. 33-40). Shigyo does not disclose that the image information reading apparatus comprises a buffer memory for storing the image data for the sheet and sequentially stores in the buffer memory the image data obtained at the time of reading the image data while sequentially outputting the image data from the buffer memory. Camara et al. discloses a scanner 24 with a Universal Serial Bus (USB) connection to a computer 22 with a display 48 (Fig. 1). The examiner notes that a buffer is inherent to a USB device. Camara et al. further discloses that, in response to a Scan/Open command, the scanner scans an image. Concurrently with this scanning action, the image progressively appears in the preview scan space 124 to visually convey that the scanner is scanning the image. In one implementation, the image is progressively displayed row-by-row from top to bottom of the image (col. 5, l. 54-61). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the network of Shigyo to progressively display an image as it is being scanned, such as that taught by Camara et al. in order to keep a user updated on the progress of a data transfer.

Referring to claim 12, the combination of Shigyo and Camara et al. teaches the system of claim 1, wherein the image information reading apparatus further comprises an erasing unit for erasing data from the sheet after reading out the image recorded therein (Shigyo col. 6, l. 49-53).

3. Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camara et al. in view of the Universal Serial Bus (USB) Specification, Revision 1.0.

Referring to claim 10, Camara et al. discloses the system of claim 1. Camara et al. does not disclose that the buffer memory outputs data at a variable rate depending on a data transfer rate of the network. The USB specification discloses a bulk transfer type of data transfer that is typically used for scanners. The bandwidth taken up by bulk data can be whatever is available and not being used for other transfer types (USB Specification p. 33, 4.7.2). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the networked scanner of Camara et al. to include transferring data according to available bandwidth, such as that taught by the USB specification in order to transfer large amounts of data more quickly.

Referring to claim 11, Camara et al. discloses the system of claim 1. Camara et al. does not disclose that the buffer memory retransmits the image data in the event of data loss during transfer over the network. The USB specification discloses ensuring the reliable exchange of data by using error detection and invoking a limited hardware retry (USB Specification p. 33, 4.7.2). The USB specification further discloses detecting a transfer error/failure and retrying the transfer (USB Specification p. 31, 4.5.1 & 4.5.2). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the networked scanner of

Art Unit: 2623

Camara et al. to include retrying a data transfer in response to detecting a transfer error, such as that taught by the USB specification in order to ensure data integrity.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600